## APPARATUS AND METHOD FOR PREPARATION OF A PERITONEAL

## DIALYSIS SOLUTION

## Abstract of the Disclosure

The invention provides an apparatus and method for storing and transporting peritoneal dialysate in dry or lyophilized form, and for forming a deliverable peritoneal dialysis solution therefrom. In one embodiment, a dry reagent bed, including reagents sufficient to produce a dialysis solution, is suspended in a diluent flow path through the apparatus housing. Continuous pressure on the reagent bed causes the bed to compact as it erodes when purified water is passed through the housing. The pressure ensures complete and even dissolution of the reagents. Through dry storage and simple dissolution, even in a home, the invention enables a wider variety of solution constituents, including reduced acid content and the use of bicarbonate as a stable buffer component. The latter is illustrated in a double-bed embodiment, where bicarbonate is stored separately from calcium or magnesium salts within a single housing.

## **PATENT**

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